

6GH8A

Medium-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

For Multivibrator-Type Horizontal-Deflection Oscillator, AGC Amplifier, and Sync-Separator Applications

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC)	6.3 ^a	6.3 ± 0.6	volts
Current	0.450 ± 0.030	0.450 ^b	amp
Warm-up time (Average)	11	—	sec

Peak heater-cathode voltage (Each unit):

Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200 ^c max.	volts

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield^d</i>	
Triode Unit:			
Grid to plate	1.7	1.7	pf
Grid to cathode, pentode grid No.3 & pentode cathode & internal shield, and heater	3.0	3.2	pf
Plate to cathode, pentode grid No.3 & pentode cathode & internal shield, and heater	1.4	1.9	pf
Heater to cathode	3.0	3.0 ^e	pf
Pentode Unit:			
Grid No.1 to plate	0.02 max.	0.01 max.	pf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	5.0	5.0	pf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.6	3.4	pf
Heater to cathode & grid No.3 & internal shield	3.0	3.0 ^e	pf

Characteristics, Class A₁ Amplifier:

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
Plate Voltage	125	125	volts
Grid-No.2 Voltage	—	125	volts
Grid-No.1 Voltage	−1	−1	volt
Amplification Factor	46	—	
Plate Resistance (Approx.)	5400	200000	ohms
Transconductance	8500	7500	μmhos



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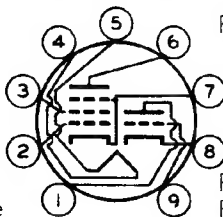
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Plate Current	13.5	12	ma
Grid-No.2 Current	-	4	ma
Grid-No.1 Voltage (Approx.) for plate μ a = 10	-8	-8	volts

Mechanical:

Operating Position.	Any
Type of Cathodes.	Coated Unipotential
Maximum Overall Length.	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip).	1-9/16" \pm 3/32"
Diameter.	0.750" to 0.875"
Dimensional Outline	See <i>General Section</i>
Bulb.	T6-1/2
Base.	Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW.	9AE

Pin 1-Triode Plate
Pin 2-Pentode
Grid No.1
Pin 3-Pentode
Grid No.2
Pin 4-Heater
Pin 5-Heater
Pin 6-Pentode Plate



Pin 7-Pentode
Cathode,
Pentode
Grid No.3,
Internal
Shield
Pin 8-Triode Cathode
Pin 9-Triode Grid

HORIZONTAL-DEFLECTION OSCILLATOR

For operation in a 525-line, 30-frame system^f

Maximum Ratings, Design-Maximum Values:

	Triode Unit	Pentode Unit	
PLATE VOLTAGE	330 max.	350 max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE	-	330 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value	0 max.	0 max.	volts
Peak-negative value	-	175 max.	volts
PLATE DISSIPATION	2.5 max.	2.5 max.	watts
GRID-No.2 INPUT	-	0.55 max.	watts
CATHODE CURRENT:			
Peak.	-	300 max.	ma
Average	-	20 max.	ma

Maximum Circuit Values (Each Unit):

Grid-No.1-Circuit Resistance: For fixed-bias or cathode-bias operation.	2.2 max.	megohms
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^a At heater amperes = 0.450.

^b At heater volts = 6.3.

^c The dc component must not exceed 100 volts.

^d With external shield JEDEC No.315 connected to cathode of unit under test except as noted.

^e With external shield JEDEC No.315 connected to ground.

^f As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

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INTERELECTRODE LEAKAGE

Leakage Resistance between Plate of Each
Unit and All Other Electrodes of both
units tied together 100 min. megohms

This test is performed under the following conditions:
heater volts = 6.3; and plate 300 volts negative with respect
to all other electrodes tied together.

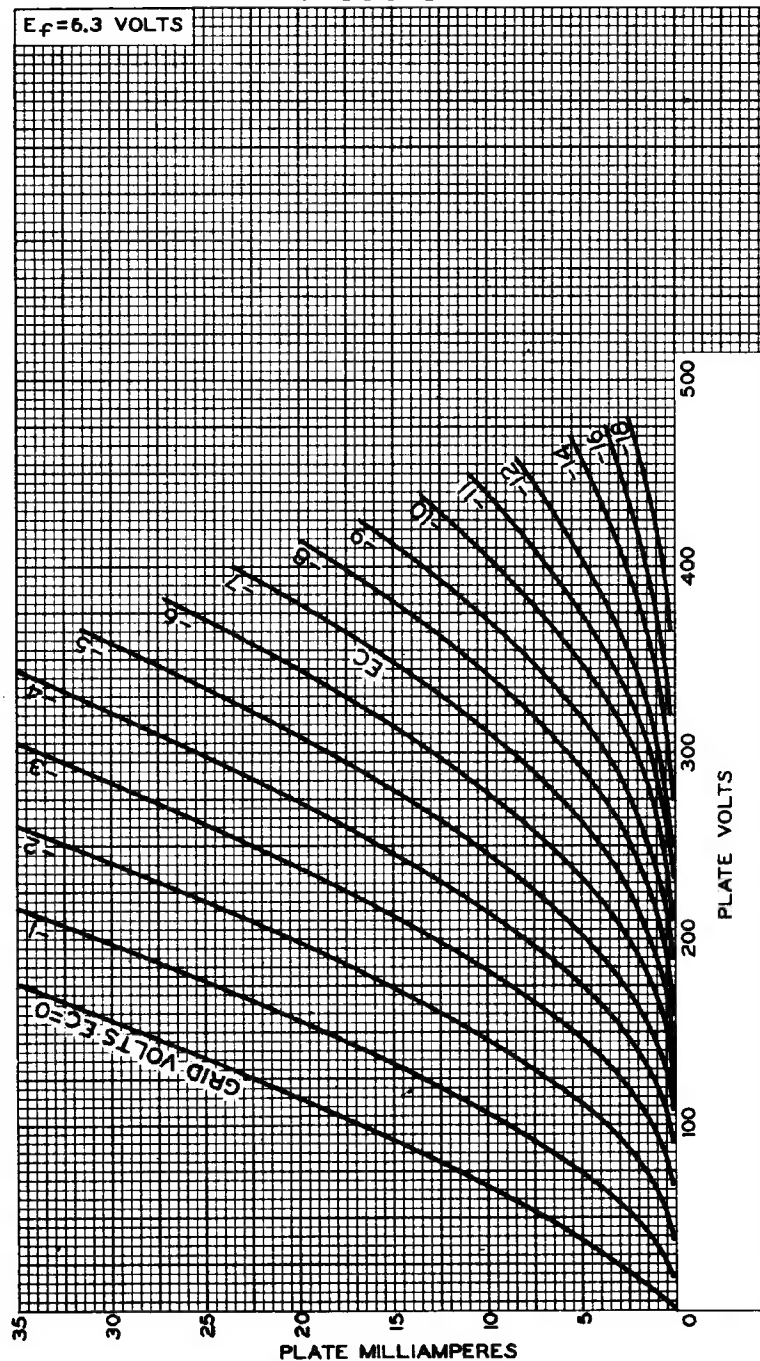
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AVERAGE PLATE CHARACTERISTICS Triode Unit



92CM-1042IRI

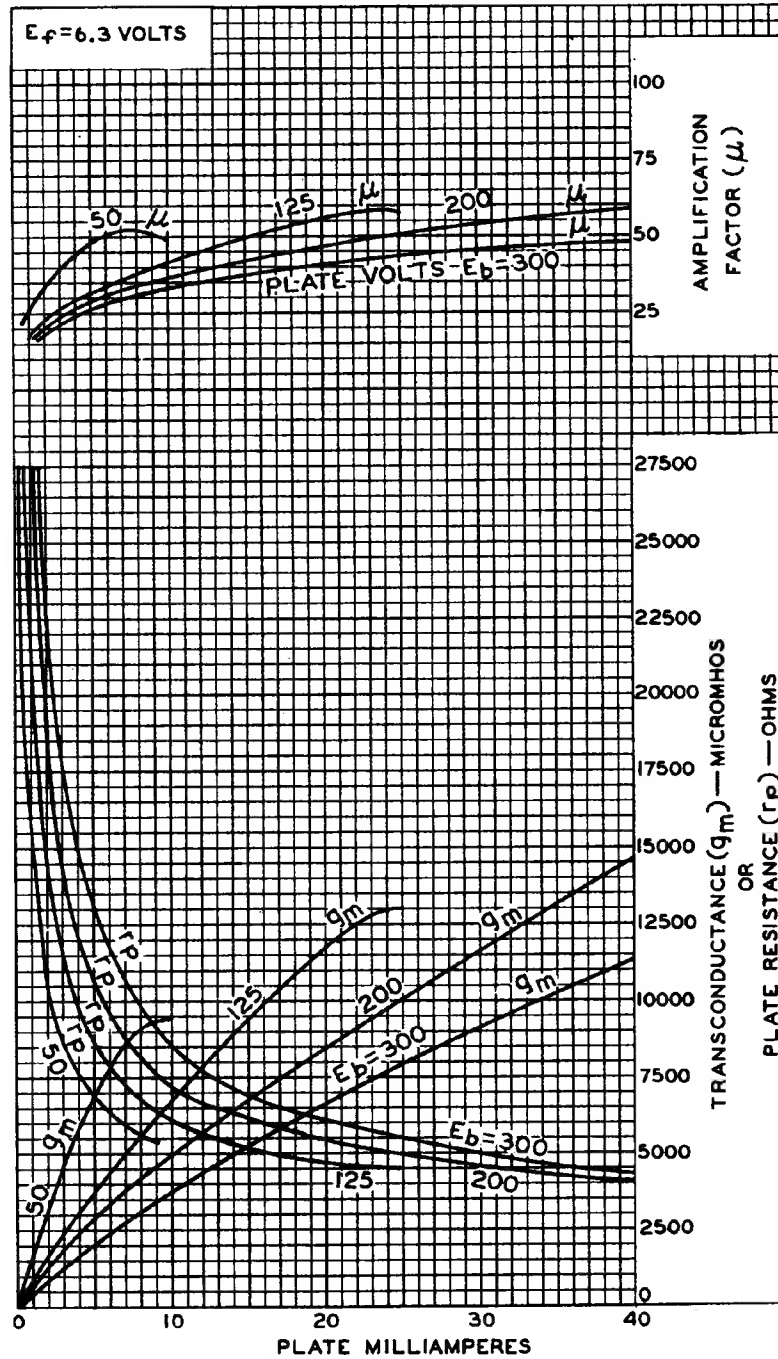
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AVERAGE CHARACTERISTICS Triode Unit



92CM-10428

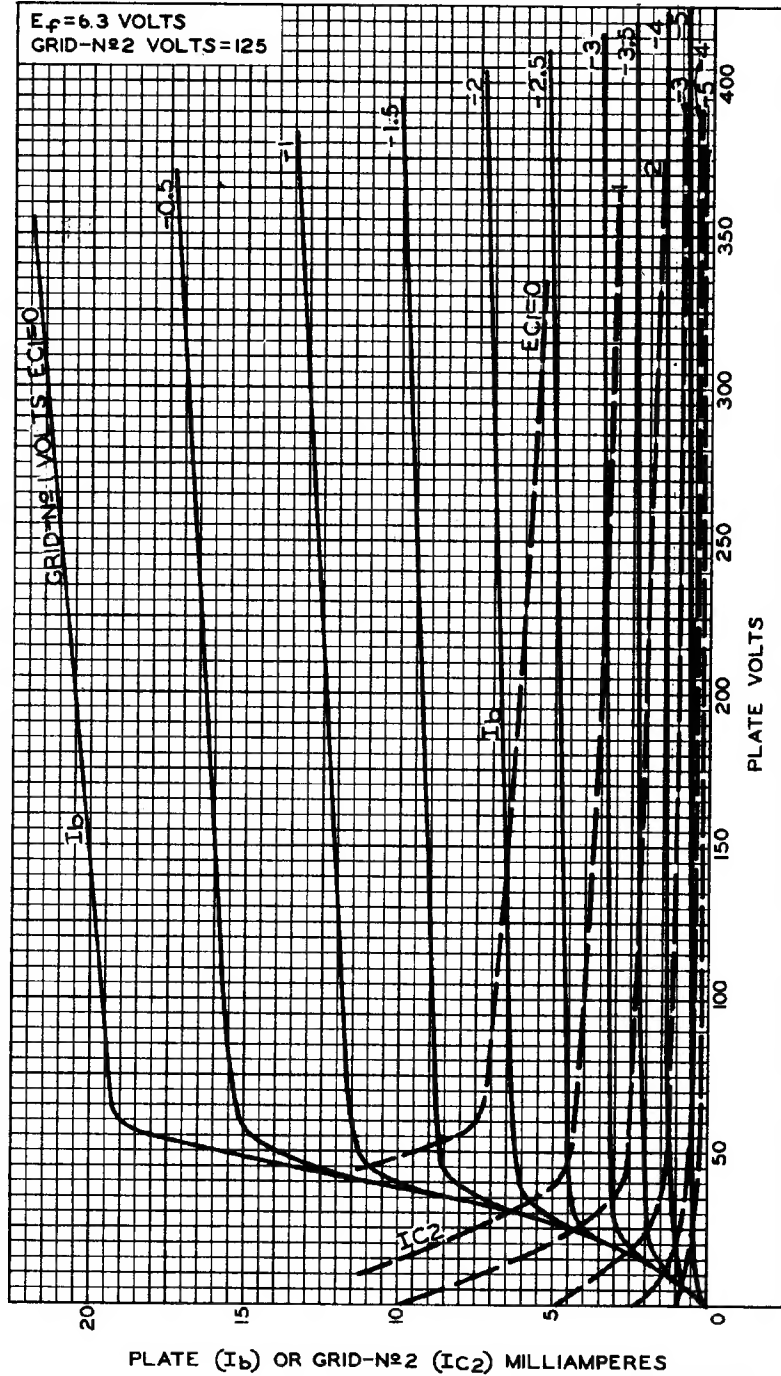


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AVERAGE CHARACTERISTICS Pentode Unit



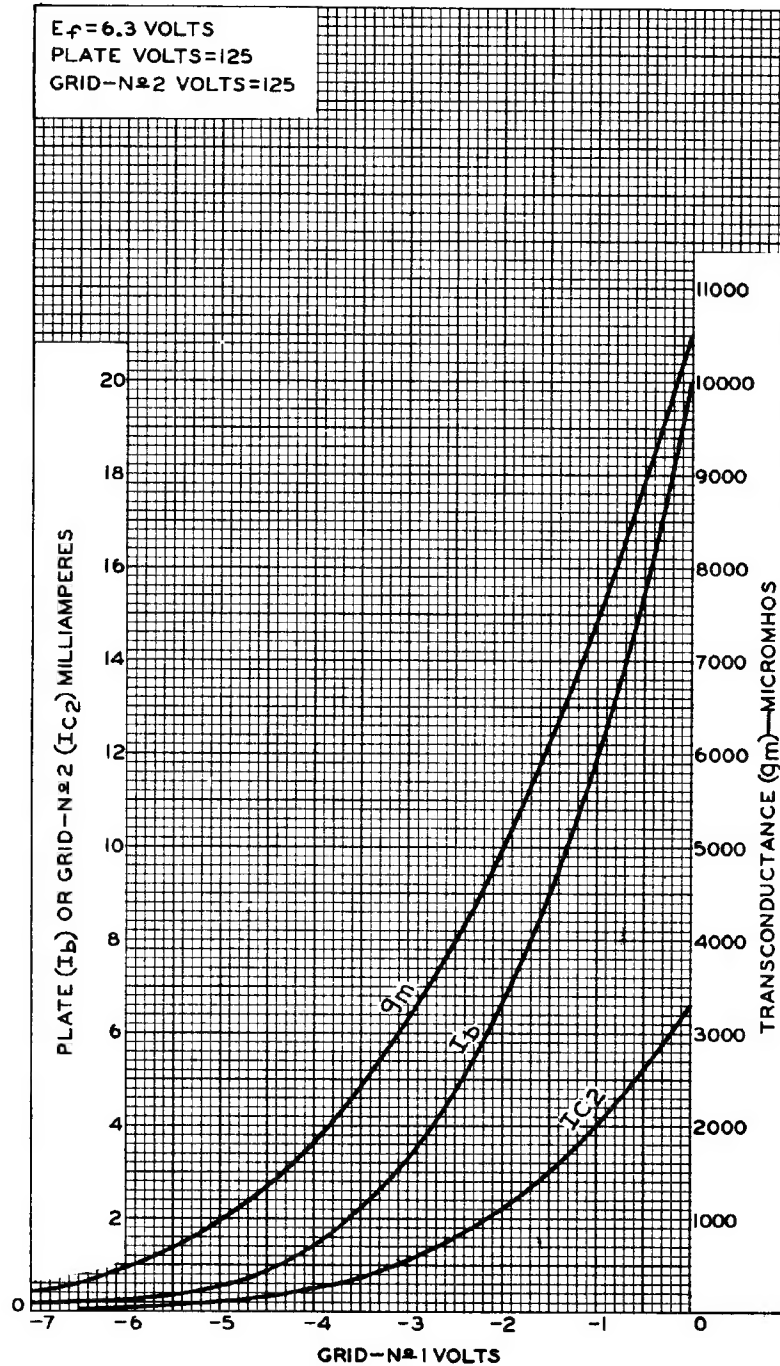
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AVERAGE CHARACTERISTICS Pentode Unit



92CM-10417



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